UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

## NOTICE OF ALLOWANCE AND FEE(S) DUE

55694

759

04/21/2010

DRINKER BIDDLE & REATH (DC) 1500 K STREET, N.W. SUITE 1100 WASHINGTON, DC 20005-1209

EXAMINER				
GARRITY, DIANA C				
ART UNIT	PAPER NUMBER			
2814				

DATE MAILED: 04/21/2010

APPLICATION NO. FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO. CONFIRMATION NO.

10/594,619 06/19/2007 Akimasa Tanaka 46884-5516 5256

TITLE OF INVENTION: SEMICONDUCTOR LIGHT DETECTING ELEMENT INCLUDING FILM WHICH COVERS LIGHT RECEIVING REGION NEAR MAIN SURFACE OF MULTILAYER STRUCTURE AND ELECTRODE ON MAIN SURFACE

APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSUE FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0	\$1810	07/21/2010

THE APPLICATION IDENTIFIED ABOVE HAS BEEN EXAMINED AND IS ALLOWED FOR ISSUANCE AS A PATENT. PROSECUTION ON THE MERITS IS CLOSED. THIS NOTICE OF ALLOWANCE IS NOT A GRANT OF PATENT RIGHTS. THIS APPLICATION IS SUBJECT TO WITHDRAWAL FROM ISSUE AT THE INITIATIVE OF THE OFFICE OR UPON PETITION BY THE APPLICANT. SEE 37 CFR 1.313 AND MPEP 1308.

THE ISSUE FEE AND PUBLICATION FEE (IF REQUIRED) MUST BE PAID WITHIN THREE MONTHS FROM THE MAILING DATE OF THIS NOTICE OR THIS APPLICATION SHALL BE REGARDED AS ABANDONED. THIS STATUTORY PERIOD CANNOT BE EXTENDED. SEE 35 U.S.C. 151. THE ISSUE FEE DUE INDICATED ABOVE DOES NOT REFLECT A CREDIT FOR ANY PREVIOUSLY PAID ISSUE FEE IN THIS APPLICATION. IF AN ISSUE FEE HAS PREVIOUSLY BEEN PAID IN THIS APPLICATION (AS SHOWN ABOVE), THE RETURN OF PART B OF THIS FORM WILL BE CONSIDERED A REQUEST TO REAPPLY THE PREVIOUSLY PAID ISSUE FEE TOWARD THE ISSUE FEE NOW DUE.

#### HOW TO REPLY TO THIS NOTICE:

I. Review the SMALL ENTITY status shown above.

If the SMALL ENTITY is shown as YES, verify your current SMALL ENTITY status:

A. If the status is the same, pay the TOTAL FEE(S) DUE shown above.

B. If the status above is to be removed, check box 5b on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and twice the amount of the ISSUE FEE shown above, or

If the SMALL ENTITY is shown as NO:

A. Pay TOTAL FEE(S) DUE shown above, or

B. If applicant claimed SMALL ENTITY status before, or is now claiming SMALL ENTITY status, check box 5a on Part B - Fee(s) Transmittal and pay the PUBLICATION FEE (if required) and 1/2 the ISSUE FEE shown above.

II. PART B - FEE(S) TRANSMITTAL, or its equivalent, must be completed and returned to the United States Patent and Trademark Office (USPTO) with your ISSUE FEE and PUBLICATION FEE (if required). If you are charging the fee(s) to your deposit account, section "4b" of Part B - Fee(s) Transmittal should be completed and an extra copy of the form should be submitted. If an equivalent of Part B is filed, a request to reapply a previously paid issue fee must be clearly made, and delays in processing may occur due to the difficulty in recognizing the paper as an equivalent of Part B.

III. All communications regarding this application must give the application number. Please direct all communications prior to issuance to Mail Stop ISSUE FEE unless advised to the contrary.

IMPORTANT REMINDER: Utility patents issuing on applications filed on or after Dec. 12, 1980 may require payment of maintenance fees. It is patentee's responsibility to ensure timely payment of maintenance fees when due.

#### PART B - FEE(S) TRANSMITTAL

### Complete and send this form, together with applicable fee(s), to: Mail Mail Stop ISSUE FEE

Commissioner for Patents P.O. Box 1450 Alexandria, Virginia 22313-1450

or <u>Fax</u> (571)-273-2885

INSTRUCTIONS; This form should be used for transmitting the ISSUE FEE and PUBLICATION FEE (if required). Blocks 1 through 5 should be completed where ap in m

maintenance fee notifica	tions.	·					correspondence address as
CURRENT CORRESPOND	ENCE ADDRESS (Note: Use Bl	ock 1 for any change of address)	Feet	c) Transmittal Th	is certif	ficate cannot be used f	r domestic mailings of the or any other accompanying nt or formal drawing, must
55694	7590 04/21	/2010	nave			e of Mailing or Trans	
1500 K STREET SUITE 1100		(DC)	I her State addr trans	reby certify that the	is Fee(	s) Transmittal is being	deposited with the United to class mail in an envelope above, or being facsimile ate indicated below.
WASHINGTON	I, DC 20005-1209						(Depositor's name)
							(Signature)
							(Date)
APPLICATION NO.	FILING DATE		FIRST NAMED INVENTOR		ATTC	RNEY DOCKET NO.	CONFIRMATION NO.
10/594,619	06/19/2007	•	Akimasa Tanaka			46884-5516	5256
			LEMENT INCLUDING F TRODE ON MAIN SURF.		VERS	LIGHT RECEIVING	REGION
APPLN. TYPE	SMALL ENTITY	ISSUE FEE DUE	PUBLICATION FEE DUE	PREV. PAID ISSU	E FEE	TOTAL FEE(S) DUE	DATE DUE
nonprovisional	NO	\$1510	\$300	\$0		\$1810	07/21/2010
EXAM		ART UNIT	CLASS-SUBCLASS				
GARRITY,  1. Change of corresponde	•	2814	257-466000				
CFR 1.363).  Change of correspondence address (or Change of Correspondence Address form PTO/SB/122) attached.  "Fee Address" indication (or "Fee Address" Indication form PTO/SB/47; Rev 03-02 or more recent) attached. Use of a Customer Number is required.			(1) the names of up to 3 registered patent attorneys or agents OR, alternatively,  (2) the name of a single firm (having as a member a registered attorney or agent) and the names of up to 2 registered patent attorneys or agents. If no name is listed, no name will be printed.				
PLEASE NOTE: Unl recordation as set fort (A) NAME OF ASSIG	less an assignee is ident h in 37 CFR 3.11. Comp GNEE	ified below, no assignee pletion of this form is NO	T a substitute for filing an : (B) RESIDENCE: (CITY	atent. If an assign assignment. and STATE OR C	COUNT	TRY)	ocument has been filed for
Please check the appropr	iate assignee category or	categories (will not be pr	rinted on the patent):	Individual LC	orporat	ion or other private gro	oup entity 🔲 Government
4a. The following fee(s) are submitted:  ☐ Issue Fee ☐ Publication Fee (No small entity discount permitted) ☐ Advance Order - # of Copies			bb. Payment of Fee(s): (Please first reapply any previously paid issue fee shown above)  A check is enclosed.  Payment by credit card. Form PTO-2038 is attached.  The Director is hereby authorized to charge the required fee(s), any deficiency, or credit any overpayment, to Deposit Account Number (enclose an extra copy of this form).				
5. Change in Entity Sta	<b>tus</b> (from status indicate s SMALL ENTITY state	· · · · · · · · · · · · · · · · · · ·	☐ b. Applicant is no long	non alaimina SMAI	LL EXT	TITY status Cas 27 C	ED 1 27(~)(2)
NOTE: The Issue Fee and	d Publication Fee (if req	uired) will not be accepte	d from anyone other than th				e assignee or other party in
interest as shown by the	records of the United Sta	ites Patent and Trademark	Office.				
Authorized Signature				Date			
Typed or printed name	e			Registration N	No		
an application. Confident submitting the completed this form and/or suggesti	tiality is governed by 35 d application form to the ions for reducing this bu Virginia 22313-1450. DC	U.S.C. 122 and 37 CFR USPTO. Time will vary rden, should be sent to th	1.14. This collection is est depending upon the indiverse Chief Information Office	imated to take 12 i idual case. Any co r. U.S. Patent and	minute ommen Trader	s to complete, including ts on the amount of time mark Office, U.S. Dens	by the USPTO to process) g gathering, preparing, and ne you require to complete artment of Commerce, P.O. for Patents, P.O. Box 1450,

PTOL-85 (Rev. 08/07) Approved for use through 08/31/2010.

Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it displays a valid OMB control number.



## UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE United States Patent and Trademark Office Address: COMMISSIONER FOR PATENTS P.O. Box 1450

P.O. Box 1450 Alexandria, Virginia 22313-1450 www.uspto.gov

APPLICATION NO.	FILING DATE FIRST NAMED INVENTOR		ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/594,619	06/19/2007	Akimasa Tanaka	46884-5516	5256
55694 7.	590 04/21/2010		EXAM	INER
DRINKER BIDI	DLE & REATH (DC		GARRITY,	DIANA C
1500 K STREET,	N.W.		ART UNIT	PAPER NUMBER
SUITE 1100 WASHINGTON, DC 20005-1209			2814 DATE MAILED: 04/21/201	0

# Determination of Patent Term Adjustment under 35 U.S.C. 154 (b)

(application filed on or after May 29, 2000)

The Patent Term Adjustment to date is 0 day(s). If the issue fee is paid on the date that is three months after the mailing date of this notice and the patent issues on the Tuesday before the date that is 28 weeks (six and a half months) after the mailing date of this notice, the Patent Term Adjustment will be 0 day(s).

If a Continued Prosecution Application (CPA) was filed in the above-identified application, the filing date that determines Patent Term Adjustment is the filing date of the most recent CPA.

Applicant will be able to obtain more detailed information by accessing the Patent Application Information Retrieval (PAIR) WEB site (http://pair.uspto.gov).

Any questions regarding the Patent Term Extension or Adjustment determination should be directed to the Office of Patent Legal Administration at (571)-272-7702. Questions relating to issue and publication fee payments should be directed to the Customer Service Center of the Office of Patent Publication at 1-(888)-786-0101 or (571)-272-4200.

	Application No.	Applicant(s)				
	10/504 640					
Notice of Allowability	10/594,619 <b>Examiner</b>	TANAKA, AKIMASA Art Unit				
·	DIANIA O CARRIEN					
	DIANA C. GARRITY	2814				
The MAILING DATE of this communication apperature All claims being allowable, PROSECUTION ON THE MERITS IS herewith (or previously mailed), a Notice of Allowance (PTOL-85) NOTICE OF ALLOWABILITY IS NOT A GRANT OF PATENT RIOF the Office or upon petition by the applicant. See 37 CFR 1.313	(OR REMAINS) CLOSED in or other appropriate commu IGHTS. This application is s	this application. If not included nication will be mailed in due course. <b>THIS</b>				
1. X This communication is responsive to Amendment filed Jan	<u>uary 5, 2010</u> .					
2. The allowed claim(s) is/are 1,3,6-10 and 21.						
<ul> <li>3.  Acknowledgment is made of a claim for foreign priority under a)  All b)  Some* c)  None of the:</li> <li>1.  Certified copies of the priority documents have</li> </ul>	e been received.					
2. Certified copies of the priority documents have been received in Application No						
3.  Copies of the certified copies of the priority documents have been received in this national stage application from the						
International Bureau (PCT Rule 17.2(a)).						
* Certified copies not received:						
Applicant has THREE MONTHS FROM THE "MAILING DATE" noted below. Failure to timely comply will result in ABANDONN THIS THREE-MONTH PERIOD IS NOT EXTENDABLE.		a reply complying with the requirements				
4. A SUBSTITUTE OATH OR DECLARATION must be subm INFORMAL PATENT APPLICATION (PTO-152) which give						
5. CORRECTED DRAWINGS ( as "replacement sheets") mus	st be submitted.					
(a) $\square$ including changes required by the Notice of Draftspers	son's Patent Drawing Review	( PTO-948) attached				
1) 🔲 hereto or 2) 🔲 to Paper No./Mail Date						
(b) ☐ including changes required by the attached Examiner's Paper No./Mail Date	s Amendment / Comment or	in the Office action of				
Identifying indicia such as the application number (see 37 CFR 1 each sheet. Replacement sheet(s) should be labeled as such in t						
6. DEPOSIT OF and/or INFORMATION about the deposit of BIOLOGICAL MATERIAL must be submitted. Note the attached Examiner's comment regarding REQUIREMENT FOR THE DEPOSIT OF BIOLOGICAL MATERIAL.						
Attachment(s) 1. ☐ Notice of References Cited (PTO-892)	5. ☐ Notice of Inf	ormal Patent Application				
2. ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)		ımmary (PTO-413),				
2. Minformation Displaceure Statements (DTO/SD/SS)	Paper No./I	Mail Date				
3. ☑ Information Disclosure Statements (PTO/SB/08), Paper No./Mail Date <u>7/22/09; 12/19/08</u>	7. 🔼 Examiners /	Amendment/Comment				
4. Examiner's Comment Regarding Requirement for Deposit	8. 🛛 Examiner's	Statement of Reasons for Allowance				
of Biological Material	9. 🔲 Other	-				
/Diana C Garrity/						
Examiner, Art Unit 2814						

Application/Control Number: 10/594,619 Page 2

Art Unit: 2814

#### **EXAMINER'S AMENDMENT**

An examiner's amendment to the record appears below. Should the changes and/or additions be unacceptable to applicant, an amendment may be filed as provided by 37 CFR
 1.312. To ensure consideration of such an amendment, it MUST be submitted no later than the payment of the issue fee.

The application has been amended as follows:

### Please cancel claims 11-20.

# Status of Claims

- 2. Amendment filed January 5, 2010 is acknowledged.
  - Claims 2, 4, 5, and 11-18 have been cancelled (see below).
  - Claims 1, 3, 6-10, and 21 are pending.
    - o Claim 1 has been amended.
    - o Claim 21 has been added.
    - o Claims 1, 3, 6-10 and 21 are examined below.
      - Claims 1, 3, 6-10 and 21 are allowed.

## Response to Arguments

3. Applicant's arguments, see Remarks, filed January 5, 2010, with respect to amended claim 1 have been fully considered and are persuasive. The rejection of the claims has been withdrawn.

Application/Control Number: 10/594,619 Page 3

Art Unit: 2814

#### Election/Restrictions

4. This application is in condition for allowance except for the presence of claims 11-20 directed to a non-elected without traverse. Accordingly, claims 11-20 have been cancelled.

### Information Disclosure Statement

5. The information disclosure statement (IDS) submitted on July 22, 2009 was filed after the mailing date of the Non-final rejection on July 7, 2009. The submission is in compliance with the provisions of 37 CFR 1.97. Accordingly, the information disclosure statement is being considered by the examiner.

### Allowable Subject Matter

6. The following is an examiner's statement of reasons for allowance: Nowhere in the prior art was the combination of limitations which includes the claimed multilayer, photodetecting structure further comprising a depression formed so as to surround the photodetecting region, and a wiring electrode arranged within the depression, nor did any combination of references show the combination of limitations to be obvious to one of ordinary skill in the art.

Any comments considered necessary by applicant must be submitted no later than the payment of the issue fee and, to avoid processing delays, should preferably accompany the issue fee. Such submissions should be clearly labeled "Comments on Statement of Reasons for Allowance."

Application/Control Number: 10/594,619 Page 4

Art Unit: 2814

#### Conclusion

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIANA C. GARRITY whose telephone number is (571) 270-5026. The examiner can normally be reached on Monday-Friday 7:00 AM - 3:30 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Wael Fahmy can be reached on (571) 272-1705. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Diana C Garrity/ Examiner, Art Unit 2814 /Phat X. Cao/ Primary Examiner, Art Unit 2814